

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A support frame for a tire assembly of a mobile irrigation system that includes a tower structure, comprising;
 - a first support member for supporting the tire assembly on one side,
 - a second support member for supporting a tire assembly on the opposite side and connected to the first support member, and
 - a force transfer member connected between the first support member and the tower structure for transferring forces generated by the tire assembly to the tower structure.
2. (original) The support frame of claim 1, wherein the force transfer member is adjustably mounted to the tower structure.
3. (original) The support frame of claim 1, wherein the first support member and the second support member are connected by a third support member.
4. (original) The support frame of claim 3, wherein the third support member comprises an adjustable telescoping member.
5. (original) The support frame of claim 1, further comprising an adjustable connection between the second support member and the tire assembly.
6. (original) The support frame of claim 3, wherein the second support member is adjustably connected to the third support member.
7. (original) The support frame of claim 6, further comprising a female member connected to the third support member that telescopically receives one end of the second support member.

8. (original) The support frame of claim 7, further comprising a compensation spring located between the second support member and the female member to adjust to forces applied to the support frame caused by uneven terrain.
9. (original) The support frame of claim 1, wherein the tire assembly comprises first and second tires mounted on an axle, and a flexible ground engaging member surrounding the first and second tires to provide a ground engaging surface to distribute the weight of the tower structure on the ground.
10. (original) A tire assembly of a mobile irrigation system that includes a tower structure, comprising
first and second tires mounted on an axle, and a flexible ground engaging member surrounding the first and second tires to provide a ground engaging surface to distribute the weight of the tower structure on the ground,
a support frame for supporting the tire assembly, and
a force transfer member connected between the support frame and the tower structure for transferring forces generated by the tire assembly to the tower structure.
11. (original) The tire assembly of claim 10, wherein the support frame comprises a first support member for supporting the tire assembly on one side and a second support member for supporting a tire assembly on the opposite side and connected to the first support member, wherein the force transfer member is connected between the first support member and the tower structure.
12. (original) The tire assembly of claim 11, wherein the force transfer member is adjustably mounted to the tower structure.
13. (original) The tire assembly of claim 11, wherein the first support member and the second support member are connected by a third support member.

14. (original) The tire assembly of claim 13, wherein the third support member comprises an adjustable telescoping member.
15. (original) The tire assembly of claim 11, further comprising an adjustable connection between the second support member and the tire assembly.
16. (original) The tire assembly of claim 13, wherein the second support member is adjustably connected to the third support member.
17. (original) The tire assembly of claim 13, further comprising a female member connected to the third support member that telescopically receives one end of the second support member.
18. (original) The tire assembly of claim 17, further comprising a compensation spring located between the second support member and the female member to adjust to forces applied to the support frame caused by uneven terrain.
19. (original) A corner sweeping unit for an irrigation system, comprising a tire assembly including first and second tires mounted on an axle, and a flexible ground engaging member surrounding the first and second tires to provide a ground engaging surface to distribute the weight of the tower structure on the ground as the tire assembly is driven about a swivel support tube, and a support frame for adjustably supporting the tire assembly.
20. (original) The corner sweeping unit of claim 19, wherein the support frame comprises a first support member for supporting the tire assembly on one side, and a second support member for supporting a tire assembly on the opposite side thereof, the second support member being telescopically connected to the first support member to accommodate tire assemblies of varying widths.
21. (original) The corner sweeping unit of claim 20, wherein the second support member is adjustably connected to the tire assembly.

22. (original) The corner sweeping unit of claim 21, wherein the second support member includes male and female telescoping members.
23. (original) The corner sweeping unit of claim 22, further comprising a compensation spring located between the male and female members to adjust to forces applied to the support frame caused by uneven terrain.
24. (original) The corner sweeping unit of claim 23, further comprising an adjustment member for adjusting the force applied by compensation spring to the tire assembly.
25. (original) The corner sweeping unit of claim 20, wherein the first support member is adjustably connected to the tire assembly.
26. (original) The corner sweeping unit of claim 20, wherein the first support member includes male and female telescoping members.
27. (original) The corner sweeping unit of claim 26, further comprising a compensation spring located between the male and female members to adjust to forces applied to the support frame caused by uneven terrain.
28. (original) The corner sweeping unit of claim 27, further comprising an adjustment member for adjusting the force applied by compensation spring to the tire assembly.
29. (new) A wheel assembly for a mobile irrigation system having an elongate boom and a plurality of downwardly extending towers, each connecting to a wheel assembly, a wheel assembly comprising:
 - at least one support frame for supporting a tire assembly on opposite sides so as to distribute weight from the tower across the opposite sides of the tire assembly and adapted to be coupled to a tower.
30. (new) A wheel assembly as claimed in claim 29, wherein the tire assembly includes dual wheels.
31. (new) A wheel assembly as claimed in claim 29, wherein the tire assembly includes at

least one wheel having a belt with traction elements.

32. (new) A wheel assembly as claimed in claim 29, wherein the support frame provides for an adjustable connection between the tower and the tire assembly.
33. (new) A wheel assembly as claimed in claim 32, wherein the adjustable connection between the tower and the tire assembly is provided by at least one spring.
34. (new) A wheel assembly as claimed in claim 32, wherein the adjustable connection between the tower and tire assembly is provided by telescoping members.
35. (new) A wheel assembly as claimed in claim 29, wherein the wheel assembly includes a swivel support tube that is telescopically coupled to a tube of the tower, allowing the wheel assembly to swivel around the tower.
36. (new) A wheel assembly as claimed in claim 29, further comprising a support frame having:
 - a first support member for supporting a tire assembly on one side;
 - a second support member for supporting the tire assembly on the opposite side
 - and coupled to the first support member, such that the weight of the tower is distributed substantially equally across the opposite sides of the tire assembly.
37. (new) A wheel assembly as claimed in claim 36, wherein the first support member is connected to the second support member, creating a support frame having a substantially U-shape.
38. (new) A wheel assembly as claimed in claim 36, wherein the first support member is adjustably coupled to the second support member.
39. (new) A wheel assembly as claimed in claim 29, further comprising a force transfer member coupled between the support member and the tower for transferring forces generated by the tire assembly to the tower.

40. (new) A wheel assembly as claimed in claim 39, wherein the force transfer member provides for an adjustable connection to the tower.
41. (new) A wheel assembly for a corner sweeping unit having an elongated boom and at least one downwardly extending tower connected to a wheel assembly, a wheel assembly comprising:
 - a support frame having a first support member for supporting a tire assembly on one side;
 - a second support member for supporting the tire assembly on the opposite side and adjustably coupled to the first support member, such that the weight of the tower is distributed substantially equally across the opposite sides of the tire assembly.
42. (new) A wheel assembly as claimed in claim 41, wherein the support frame is adjustably mounted on the tire assembly.